

SELECTED TOPICS IN ADVANCED ELECTRONICS

Edited by
Khalid A. S. Al-Khateeb



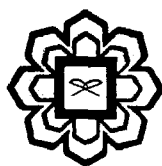
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CHAPTER 1

WIRELESS CONNECTIVITY OF PC PERIPHERALS USING ULTRAWIDE BAND PULSES

By

Khalid A. S. Al-Khateeb and Ahmed Ramzi Mohammed

Electrical and Computer Engineering Department

Kulliyyah of Engineering

International Islamic University Malaysia

Gombak, Selangor, Malaysia

Synopsis

Dozens of new devices and computer peripherals are being introduced to the market at a fast rate. The connectivity of these new devices by hard wiring results in a thicket of spaghetti made of cables and wires, which are very inconvenient to users. Therefore a personal wireless networking of about 10m radius using Impulse Radio Ultrawide Band (IR-UWB) can provide a plausible solution to the current and future problems.

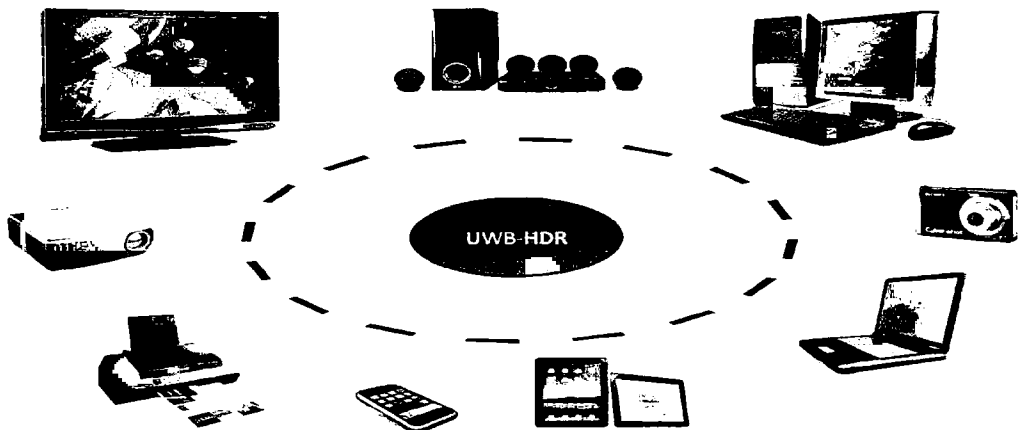


Figure 1, Examples of PC and a number of peripheral devices

There is however two main factors that hinder the wide use of such systems. The first is a fast bit rate of a few Gbps required for the large data exchange between the computer and the host of peripheral device. The second is the problem of interference with the